

Fixed RFID Tunnel



Installation Guide



ZEBRA

Copyright

© 2022 ZIH Corp. and/or its affiliates. All rights reserved. ZEBRA and the stylized Zebra head are trademarks of ZIH Corp., registered in many jurisdictions worldwide. All other trademarks are the property of their respective owners.

COPYRIGHTS & TRADEMARKS: For complete copyright and trademark information, go to: www.zebra.com/copyright

WARRANTY: For complete warranty information, go to: www.zebra.com/warranty

END USER LICENSE AGREEMENT: For complete EULA information, go to: www.zebra.com/eula

Terms of Use

Proprietary Statement This manual contains proprietary information of Zebra Technologies Corporation and its subsidiaries (“Zebra Technologies”). It is intended solely for the information and use of parties operating and maintaining the equipment described herein. Such proprietary information may not be used, reproduced, or disclosed to any other parties for any other purpose without the express, written permission of Zebra Technologies.

Product Improvements Continuous improvement of products is a policy of Zebra Technologies. All specifications and designs are subject to change without notice.

Liability Disclaimer Zebra Technologies takes steps to ensure that its published Engineering specifications and manuals are correct; however, errors do occur. Zebra Technologies reserves the right to correct any such errors and disclaims liability resulting therefrom.

Limitation of Liability In no event shall Zebra Technologies or anyone else involved in the creation, production, or delivery of the accompanying product (including hardware and software) be liable for any damages whatsoever (including, without limitation, consequential damages including loss of business profits, business interruption, or loss of business information) arising out of the use of, the results of use of, or inability to use such product, even if Zebra Technologies has been advised of the possibility of such damages. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Contents

Introduction	1
Included Hardware	1
Typical Tool Requirements	1
Installation	2
Feet	2
Connecting the A-Panel Cables	3
Connecting the Internal Panel Cables	3
Panel Assembly	4
Mounting	6
Connecting Power.....	6
Cleanup	7

Introduction

Built especially for inline conveyor operations, these units automatically read tagged assets as they move along the line and through the tunnel, improving workflow accuracy. Specialized antennas provide superior performance optimized for accurate, reliable reads of conveyor-based throughput.

This document describes how to perform a typical installation of the Zebra Tunnel RFID Portal.

Included Hardware

- A-Panel with control box and one antenna
- B-panel with one antenna
- C-panel with 2 antennas
- L-brackets
- Feet
- 40 @ 1/4-20 x 2-inch screws (panel feet assembly, panel to panel assembly)
- 3/8-inch x 3-inch Screw Anchor (floor mounting)

Typical Tool Requirements

- Box Cutter
- Snips
- Tape Measure
- Speed Square
- Hammer Drill
 - 3/8-inch Concrete Drill Bit
- Impact Driver
 - 3/8-inch Socket
- Extension Cord(s)
- Vacuum or Broom

Installation

This installation should only be performed by a professional technician trained to install this hardware.

Read these instructions thoroughly before performing the installation.

The Zebra RFID Tunnel Portal requires assembly of three main parts:

- A-Panel (side)
- B-Panel (side)
- C-Panel (top)

The Tunnel Portal and be assembled and then put into position over the conveyor or other apparatus, or it can be assembled in place.

This assembly and installation requires no less than two persons to perform.

Feet



Note • Tunnel feet are not installed prior to shipment.

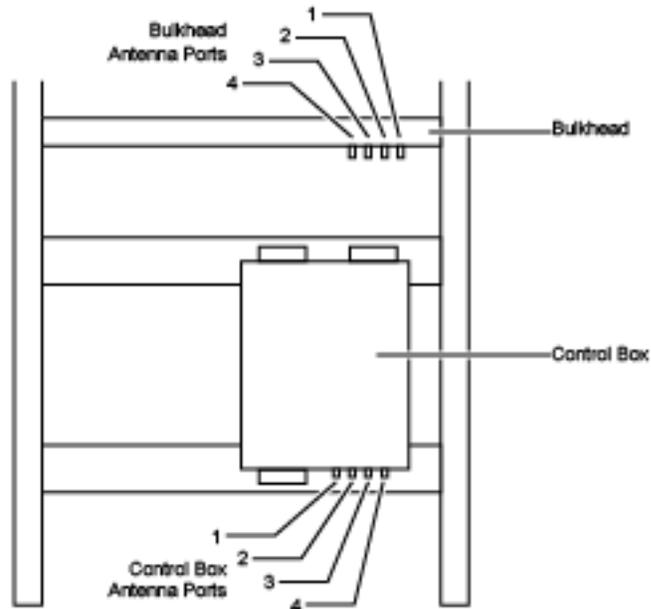
1. Install the feet to the bottom of the A panel and the B panel.

Attach the feet to the panel using 4 each of the 1/4-20 x 2-inch screws.



Connecting the A-Panel Cables

2. Connect the antenna ports at the bottom of the control box to the corresponding antenna ports on the bulkhead of the A-panel.



Connecting the Internal Panel Cables



Note • Cable installation and routing must be performed before final assembly.

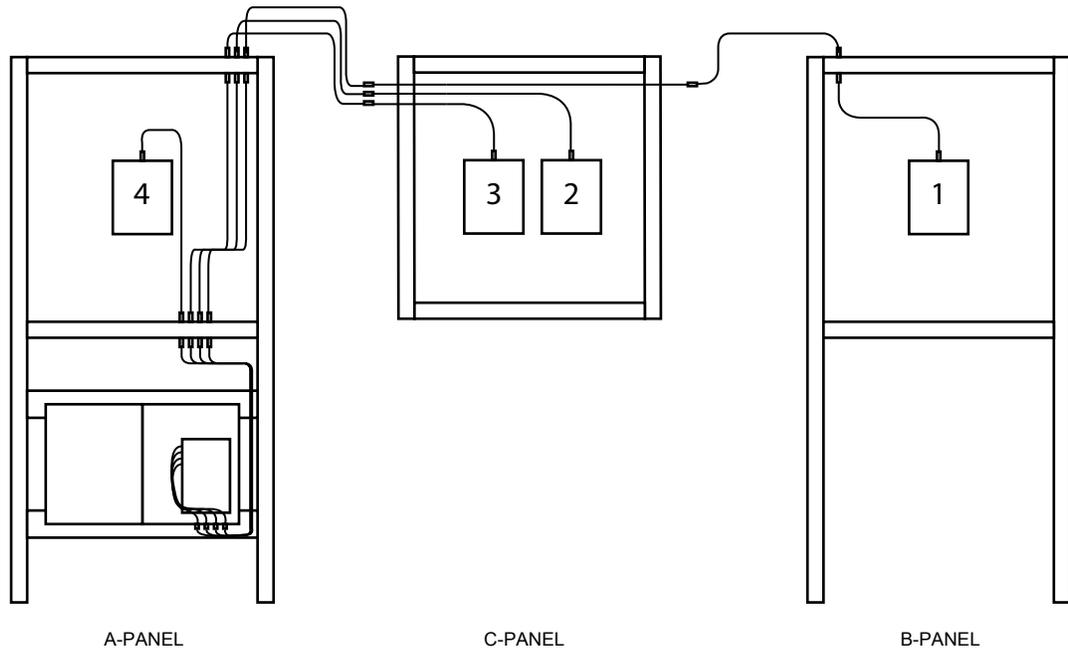


Note • Antenna ports should be towards the inbound side of the tunnel.

3. From the A-panel:
 - a. Connect Antenna port 1 to the passthrough cable in the C-panel.
 - b. Connect Antenna port 2 to the cable connected to Antenna 2 in the C-panel.
 - c. Connect Antenna port 3 to the cable connected to Antenna 3 in the C-panel.

- From the B-Panel:

Connect Antenna port 1 to the passthrough cable in the C-panel.



Panel Assembly



Note • Two left-side brackets and two right-side brackets are included. Brackets should be installed with the chamfer facing out.

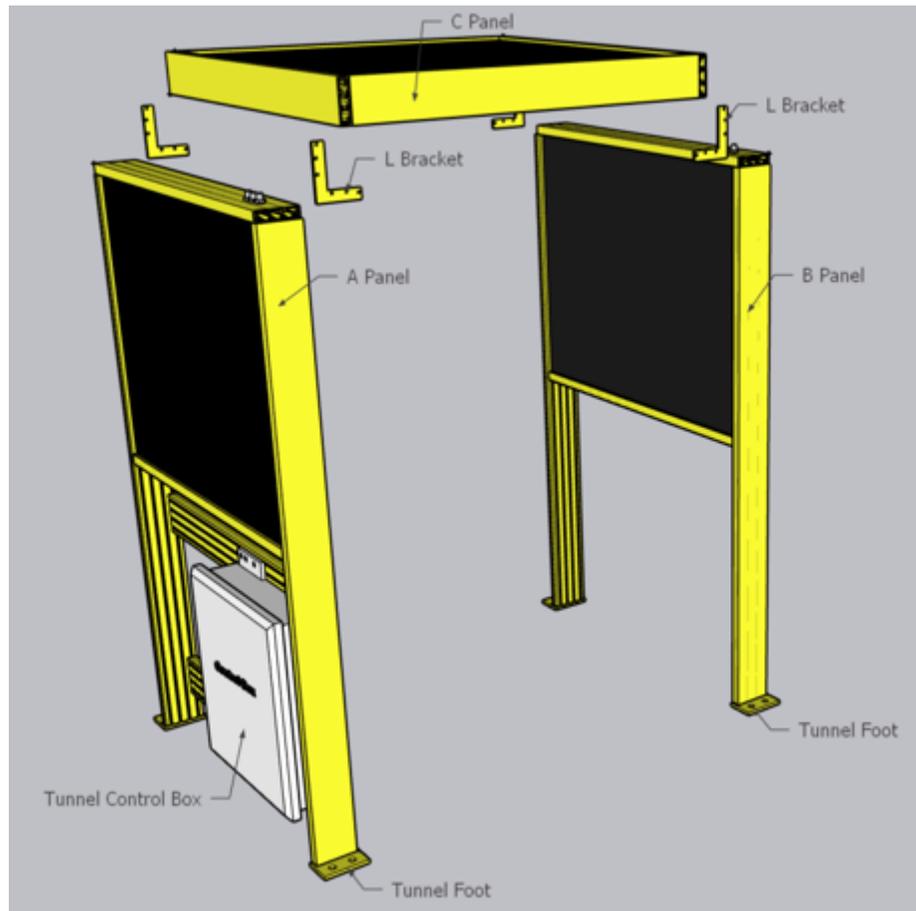


Note • Make sure the the cutouts on the C-panel underside cover are directly over the respective antenna ports on the A- and B-panel.

- Secure the A-panel to the C-panel using one each right- and left-side bracket and 6 each of the 1/4-20 x 2-inch screws.

Installation

- Secure the B-panel to the C-panel using one each right- and left-side bracket and 6 each of the 1/4-20 x 2-inch screws.



Mounting

7. Using a 3/8-inch concrete drill bit, drill one hole to a depth of 3 inches.
8. Using an impact driver, secure the tunnel base to the floor using one 3/8-inch HD screw anchor.

Connecting Power

9. Connect the Power over Ethernet (PoE) cable. Route the cable from the drop through the access hole in the bottom of the control box to the PoE connection on the reader.

Cleanup

Make sure to remove any packing material, packing ties, tools, and other equipment from the installation.

Make sure to clean up any dust or debris created by the installation.

Make sure to remove any packing material, packing ties, tools, and other equipment from the installation.

Make sure to clean up any dust or debris created by the installation.

